#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization International Bureau



### 

(43) International Publication Date 29 January 2004 (29.01.2004)

PCT

## (10) International Publication Number WO 2004/009810 A2

(51) International Patent Classification<sup>7</sup>: C12N 15/00, A01K 67/027, C07K 14/705, C12N 15/62, 5/10, G01N 33/50 of Biochemistry and Molecular Biology, Division of Microbiology, University of Leeds, Leeds, Yorkshire LS2 9JT (GB).

(21) International Application Number:

PCT/EP2003/007939

(22) International Filing Date:

17 July 2003 (17.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0216729.4

18 July 2002 (18.07.2002) GB

(71) Applicant (for all designated States except US): GLAXO GROUP LIMITED [GB/GB]; Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex UB6 0NN (GB).

(72) Inventors; and

(75) Inventors, and (75) Inventors/Applicants (for US only): BLAIR, Edward, Duncan [GB/GB]; C/O GlaxoSmithKline, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY (GB). CLARKE, Neil, James [GB/GB]; GlaxoSmithKline, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY (GB). JOHNSTON, Sebastian, Lennox [GB/GB]; National Heart And Lung Institute, & Wright Fleming Institute of Infection & Immunity, Faculty of Medicine, Imperial College London, Norfolk Place, London, W2 1PG (GB). ROWLANDS, David, John [GB/GB]; School

- (74) Agent: HACKETT, Ruth, Elizabeth; GlaxoSmithKline, CIP (CN925.1), 980 Great West Road, Brentford, Middlesex TW8 9GS (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANIMAL MODELS

(57) Abstract: A transgenic non-human animal whose genome comprises a polynucleotide encoding human ICAM-1 domains D1 and D2 and preferably encoding human ICAM-1 domains D1 and D2 and host non-human ICAM-1 domains D3, D4 and D5. Methods for the production of such transgenic animals, screening methods using such transgenic animals, associated transgenes, constructs, vectors, and cells are disclosed. The transgenic non-human animal is a suitable model for studying human rhinovirus infection.